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Congressional Scorecard

R&D Budgets: Eluding the Ax in a Tough Year

Rancorous months of unfinished budget business face Congress when it returns from summer recess this week, but from work completed so far this session, the general outlines of its treatment of research and development spending are fairly clear:

No big cuts—in contrast to slashes in both military and civilian spending outside R&D fields—and even some small increases for several R&D agencies. Overall, when fiscal 1986 begins on October 1, science, technology, and related activities are very likely to remain approximately level.

By the old standards of zippy growth as an essential sign of health, the prospects for the New Year may suggest that the Congress is either cooling on science or unheeding of its ravenous needs. In reality, however, the anti-deficit politics that now dominates Washington provides few opportunities for generosity—and R&D budgets have been getting a good share of those few, as can be seen from Congressional treatment of the following major R&D agencies:

Q&A With the NIH Director: Budget and Applications Rise—Page 3

National Institutes of Health. The most telltale sign of Congressional desire to be good to science came on the eve of the August recess with the passage of a supplemental appropriations bill that assured NIH of 6200 new and continuing grants this year, rather than the cutback to 5000 sought by the Office of Management and Budget (SGR Vol. XV, No. 2). The final verdict fell short of the 6500 grants that the last Congress intended for the current fiscal year. But it fully reversed another OMB cutback attempt by earmarking funds for all of the 533 research centers that NIH had planned to support this year. Viewed against the high frequency of budgetary mayhem this year on Capitol Hill, the outcome was remarkably favorable.

Still to come are decisions of the House and Senate Appropriations committees on the NIH budget for fiscal 1986. In anticipation of the ample additions that Congress usually makes to the NIH request, the White House proposed a mere $250-million increase to NIH's current $4.4-billion budget. But it's not likely to come out that way, given the pro-NIH war whoops that were sounded at budget hearings this year by NIH's appropriations Chairmen, Rep. William H. Natcher (D-Ky.) and Senator Lowell P. Weicker Jr. (R-Conn.)

National Science Foundation. For its scale of operations, NSF got a big increase last year—from $1.3 billion to $1.5 billion for the current fiscal year. The increase reflected the surging political enthusiasm for science and technology as economic nostrums, as well as pleadings for help from the university science lobbies. But for the coming year, not even NSF could escape Washington's anti-deficit obsession. The White House asked for only a $68-million increase, which would bring the 1986 budget to $1.569 billion. In a floor vote on July 25, the House voted to raise the NSF budget by only $22 mil-

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In Brief

Inquiries into some of the most nettlesome financial issues in federal-academic science relations have been undertaken by the General Accounting Office at the request of the Science Policy Task Force of the House Science and Technology Committee. One GAO study will "try to assess the true total cost of research and . . . review the extent to which indirect cost payments support other university functions." Another will make comparative studies of the "funding systems of other nations and foundations and industry," and a third will look at the "relative merits of different funding systems. . ."

NSF's snail's pace in spending the science-education money appropriated by Congress has drawn sharp words from the House Appropriations Subcommittee that handles the NSF budget. Expressing disappointment with a carryover this year of $31 million, the Subcommittee added that NSF has not responded to its September 1984 request for a report on its 1985 spending plans for science education. It went on to tell NSF that by September 30, it wants "detailed projections on month-by-month obligation rates" for fiscal 1986, which begins October 1.

Using the unspent money as a cushion, the White House asked Congress for only $50.5 million for NSF education activities next year—$36.5 million less than the amount appropriated for this year. The House voted for $60.5 million, specifying that the $10-million addition was to be used for "teacher training, college instrumentation program and materials development activities."

. . . Protecting Science in Space Station Project

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lion. The Senate Appropriations Committee has voted for a $38-million increase. The full Senate will probably take up the bill sometime this month. If custom holds, the House and Senate will split the difference.

What accounts for Congress putting the brakes on NSF's growth? Apart from enduring impatience over NSF's slow return to science and math education, there's no dissatisfaction with NSF's performance, except among those members who feel their constituents aren't getting a fair share of those science programs. Unfortunately for the Foundation, however, it is grouped for Congressional appropriations review with the Department of Housing and Urban Development (HUD), and this year, the Administration sought a 2-year freeze in HUD's politically popular program of low-income housing subsidies.

Science vs. Housing Aid

If Congress went along, the housing program, now budgeted for nearly $11 billion, would drop to $499 million next year. The House recoiled at that and trimmed only $568 million, thus leaving housing subsidies in the $10-billion range. Even so, they're down sharply from where they were pre-Reagan. As Rep. Edward Boland (D-Mass.), Chairman of the Appropriations Subcommittee that handles both the NSF and the HUD budget, has often pointed out, it is politically difficult to be generous to science when programs for sheltering the poor have declined from 250,000 housing units a year in 1980 to fewer than 100,000 at present.

NASA. The space agency also travels with HUD in the budget review process, and it too shared NSF's fate of the House voting an increase over last year's budget, but falling short of the Administration's request. This year's R&D budget for NASA totaled $2.4 billion. The Administration asked for an increase of $459 million, but the House accepted the recommendations of Boland's Subcommittee for only a $334-million increase, and voted down a floor attempt to freeze NASA's spending at the current annual level.

In its report, Boland's Subcommittee set a 1986 cap of $200 million for NASA's next celestial welfare enterprise, the manned space station. Obviously drawing lessons from the sad history of Space Shuttle overruns draining resources from NASA's science programs, the Subcommittee noted that last year it had "suggested that if future budget deficits did not permit the full development of the space station . . . it was essential that the permanently manned elements not be the principal or sole survivor of budget retrenchments. Since that concern was expressed," it continued, "the budget situation has deteriorated." To protect against stripping science to pay for the space station, the Subcommittee report noted that it has recommended exploration of a "complementary' man-tended option"—a design that would not incur the costs of astronauts in residence. But it also stated that, for the present, it is still shares "the common goal of a permanently manned space station that includes *at the outset* the useful and productive activities planned."

Department of Energy. DOE's General Science and Research budget, which supports high-energy and nuclear physics, received $521 million this year, and was budgeted by the White House for a $24-million operating increase in 1986. The House Appropriations Committee voted for only a $14-million increase, while the Senate Appropriations Committee voted to raise the budget by about $7.5 million.

High-Energy Physics

At the same time, the budget for Plant and Equipment, $208 million this year, was budgeted by the Administration for $139 million next year; the sharp decline reflects a hold on major new projects and the completion of upgrading programs at Fermilab and the Stanford Linear Collider. Both the House and the Senate Appropriations Committees added $10 million to the Administration's Plant and Equipment request. Half of the increase was earmarked for detectors and equipment at the 2 high-energy labs, while another $4

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Q & A With NIH Director James Wyngaarden

James B. Wyngaarden, Director of the National Institutes of Health, was interviewed August 23 by SGR editor Greenberg. Following is the text, transcribed and edited by SGR.

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SGR. Congress has approved 6200 grants for this year, rather than the 5000 that OMB wanted. Will you be able to award them all this late in the fiscal year?

Wyngaarden. It's getting a little late, but we have been gearing up to it. We've pretty well identified the grants that can be paid. OMB regards the 6200 awards and the 533 centers as a legal obligation.

SGR. Will this year's appropriation allow for an increase in the funding rate [of grant applications]?

Wyngaarden. It will go up some. But one of the responses of the scientific community to the increase in budget [that Congress voted last year] was a much larger number of applications. It's gone up by about 2500, so that instead of dealing with 16,000 or 17,000 applications, I think we're at 19,500 this year. Some of it represents additional people, some of it multiple applications. There's also been a jump in reapplications of individuals who fell just below the cutoff line. That's been growing rather steadily in recent years. In spite of that, I think the percentage of approved applications will be in the high 30s, on average.

SGR. And funded at the requested level?

Wyngaarden. We've tried to get away from arbitrary downward negotiation. There's always a little bit of final rounding off in negotiation on many of these grants, and a little saving results. On average, we have about a 3-percent downward negotiation on new grants and 1 percent on continuing grants. But that comes from discussing the needs with the investigator, and sometimes they discover they can't hire a technician that they thought they might, or something of that sort.

SGR. There's been discussion of using different grant mechanisms to reduce the application workload.

Wyngaarden. In the area of mid-career outstanding scientists, we have two programs of 7-year awards. The Javits Awards in the Neurology Institute, and the Cancer Institute Outstanding Investigator Awards. All Councils [of the NIH institutes] have considered that issue and all have agreed that their institute should go forward with some number of longer awards.

In addition, we've asked the councils to look at all grants that have been arbitrarily reduced in length. There are many scientists who apply for 5 years; the study section awards 3 years, but no comment is made as to why the 4th and 5th years were deleted. If there's no justification for that, the councils have been asked to consider restoring those additional years, and they have done so. If they state that this project will not require 5 years to complete, we've asked the councils to look very carefully at the logic of that, because I'm very anxious that we move as much as we can toward the investment philosophy rather than procurement.

It seems to me rather ludicrous to be looking that precisely at the proposal—to say that this will take 3 years, this will take 4 years, when in actuality, no scientist knows what he's going to be doing next year. If it's a good project, a good theme, in a laboratory that has a good track record, and there's every indication that this is going to be a productive scientist—whether he or she does exactly what's on the paper—then I've urged them to restore the additional years. They're doing it, they really are.

SGR. But still most grants here are for 3 years, aren't they?

Wyngaarden. Before we started this new emphasis, about 90 percent were for 3 years, and the average for

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Budget

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million was for upgrading the alternating gradient synchrotron at the Brookhaven National Laboratory. Wary of easily ignited expectations, the Senate Appropriations report states that "the addition of these funds does not represent a commitment of any kind to a larger high-energy physics facility at BNL."

DOE's magnetic fusion program, which has suffered severe financial reductions in recent years, seems bound to decline even further. This year's budget stands at $436 million. The Administration proposed $390 million for 1986. The Senate Appropriations Committee voted for $383 million, while its House counterpart approved $385 million.

Agriculture. The House Appropriations Committee voted to keep the Agricultural Research Service very close to its current budget of $496 million; the White House wanted to trim ARS by nearly $10 million. For the Cooperative State Research Service, currently budgeted at $285 million, the Administration sought a $34 million cut for next year, but the House Committee agreed to only a $10 million reduction.

On the annually contended issue of Competitive Research Grants, the Committee turned down the Administration's request to keep the program at its current $46 million level and voted for just $34 million for next year. All of the money was earmarked by the Committee for specific programs, with most of them sharing in the reduction. The only exceptions were biotechnology, $20 million this year and budgeted for the same amount next year, and human nutrition, which would be kept at its current $2-million level. The Senate Appropriations Committee is still to report on the Agriculture budget.

. . . NIH Examining Biotechnology Links with Industry

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the NIH award was 3.1 or 3.2 years. I suspect that will be going up.

SGR. How many 7-year awards have been made?

Wyngaarden. The Cancer Institute just started; Neurology has about 60. It's relatively small number, but it should be. The 7-year awards should be reserved for people of outstanding records, whose productivity is a foregone conclusion, regardless of which direction they go.

We're also looking at the question of the first-time awardee and the length of award there. I'd like to make them longer, too. The 3-year award, in many cases, isn't long enough for the person to show what can be done. We're also considering a possible expansion of the program of starter grants. It has in the past been for 3 years, it has had a $35,000 ceiling. Some institutes would like to liberalize that ceiling, extend it to 5 years and use that as a first-time award vehicle.

SGR. Some people on study sections complain that the workload is unreasonably heavy.

Wyngaarden. We have managed to expand the number of review groups. It's now under better control. We're trying to reduce it further, not by expanding the number of groups, but by reducing the size of the application, probably to a 25-page limit. I'm amazed at the paucity of information that constitutes an application in Great Britain or Australia. In 5 or 6 pages, they have to say what they're going to say. You can make a pretty good judgment as to the merit of those applications.

Kirschstein Committee

SGR. The White House Science Office says NIH should do more for the biotechnology industry. Where do things stand in regard to that?

Wyngaarden. We've formed an internal committee which Dr. [Ruth] Kirschstein [Director, National Institute of General Medical Sciences] is chairing to look at this. We're participating with NSF in a biotechnology program at MIT. But our role in that is small, about $150,000 out of maybe a total of a million, to cover the training of engineers in biology, and that's an average size training grant. In addition, we'll be holding major briefing sessions for the biotechnolgy industry, for their CEOs, on what the NIH is—its history, its programs, plans, and so forth. It turns out that many of them don't know much about the NIH. We're also planning a 2-day seminar for some of the chief scientific officers and major scientists of these institutions, so they can visit the NIH, learn about our programs. The hope of this is that we can increase the interchange between scientists in the two areas.

We have also now officially promulgated a new consultation policy which permits our intramural scientists to consult with industry, under certain guidelines; so, we can anticipate increasing interaction in both directions. Under the policy, they can receive honoraria for that. A person who wishes to consult for industry must file the usual kind of request for outside activity. That's reviewed by members of our intramural staff, and must be approved by the Deputy Director for Intramural

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Social Science Review Set By House S&T Task Force

Federal involvement with the social sciences is soon coming up for its first extensive Congressional review in over 15 years.

The subject will be examined at hearings September 17, 18, and 19 before the House Science and Technology Committee's Science Policy Task Force, which is conducting a 2-year inquiry into federal relations with virtually all fields of research. In preparation for the hearings, the Congressional Research Service has produced a review of federal support and utilization of social-sciences research. The tentative hearing schedule:

First day: Senator Daniel Patrick Moynihan (D-NY), a Fletcher School PhD who was in and out of academe and numerous government posts before election to the Senate in 1977; Herbert Simon, Carnegie-Mellon, and the co-chairmen of a major study of the social sciences underway at the National Academy of Sciences, Duncan Luce, Harvard, and Neal Smelser, UC Berkeley.

Second day: Joseph Newhouse, Rand Corp.; Clark Abt, Abt Associates; Walter Albers, General Motors Research Laboratories; Rosabeth Moss Kantor, Goodmeasure, Inc. (Cambridge, Mass.), and James R. Coleman, University of Chicago.

Third Day: Francis X. Sutton, Ford Foundation; Marshall Robinson, Russell Sage Foundation; Albert Rees, Sloan Foundation, and Amitai Etzioni, George Washington University.

The hearings, open to the public, will be held in Room 2318 Rayburn Building. The sessions will begin at 10 am and will run for about 2 hours each. For additional information: (202) 225-1062.

. . . New Rules Expand NIH Consulting Opportunities

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Research. We have to be satisfied that there's no conflict of interest. This is not an opportunity for an intramural scientist to share his or her most recent experiments with industry on a selective basis. It's an opportunity for industry to use that scientist's general knowledge and expertise in a field to consult about certain courses they might wish to consider.

SGR. How do you maintain the separation?

Wyngaarden. We have many good protein chemists here, for example, and many industries need that expertise. They may not get close, though, to what that person is actually doing in the laboratory. This policy has evolved in a couple of stages. There was a time when NIH intramural scientists were not permitted to have any kind of continuing contact. Then, some years ago, we permitted them to give lectures, at a maximum of $2000 per lecture, with a maximum of $25,000 per year. Some of our intramural scientists probably reached that limit. Some of the lectures were given for industry, but they had to be open lectures. We have now liberalized that, so that in addition, a person can actually consult, with the same ceiling. It's additive, so that with lecturing and consulting, it could reach $50,000. But there are limits also as to how much of that can come from any one company.

SGR. It's been suggested that NIH should take more scientists from industry into its laboratories.

Wyngaarden. We would welcome more scientists from industry who wanted to work at the NIH for a period of time. We have quite a few from foreign countries, and some from this country, but the balance is just the opposite of what one might expect.

Industries Differ

SGR. Has a clear picture emerged of what the White House Science Office thinks would be a desirable role for NIH in regard to the biotechnology industry?

Wyngaarden. What's become clear is that industry itself is not of a uniform mind. The one concrete suggestion that emerged [from the June meeting of the NIH Director's Advisory Committee, where NIH-industry relations were discussed]—was for greater attention to what has been called generic applied research, research that has to do with general processes, not one that would be specifically tailored toward a particular product. One example is growing tissue cultures in large quantities. That's still kind of a desk-top, petri-dish science and industry needs to be able to do that in large vats. If that problem were well-solved, many people could make use of it. But it turns out that the larger industries feel that the government should stay out of that, because for them, the ability to patent the process is almost as important as patenting the product.

On the other hand, the small biotech firms, that do not have huge science staffs of the others, want federal assistance very much. They say they can't afford to explore all those avenues. We haven't gone any further. We're waiting to see what the Kirschstein Committee advises. For the moment, if there is a change in direction, it is essentially that of trying to catalyze more interactions with industrial scientists.

Recruiting Problems

SGR. Does that require additional resources for NIH?

Wyngaarden. For the interactions, not really. If indeed we were flooded with [industrial] scientists at the intramural level, it might, but we can set limits, if necessary, as to how many we can accommodate. I would say we could handle 50 or 100 without any strain at all.

SGR. How are you doing when you go out to recruit people for senior staff positions here?

Wyngaarden. It gets more difficult. The gap between our top salary and that available in academia is widening. The maximum for a physician is $77,000 or $78,000; for a PhD, it's about $10,000 less. We've talked to several people in connection with vacancies. They're quite interested until they hear that salary. It's not rare now for an outstanding academic scientist to be making $150,000.

SGR. Whatever happened to the visit to the Soviet Union for which you were invited last year but that was turned down by the State Department (SGR Vol. XIV, No. 15)?

Wyngaarden. That's been put on hold. Once in a while I hear a comment that it's being reconsidered, but I haven't had any direct word about it.

SGR. What is the extent of NIH's dealings with the Soviets?

Wyngaarden. We have activities primarily in 3 areas: In the Heart Institute, where the programs deal with circulatory-assist devices and hypertension control, and those are quite active. We have a fair amount of interaction through the National Institute of Environmental Health Sciences, where we share toxicological information. We have, on paper, a fairly large collaborative program in cancer control, but that doesn't seem to flourish.

(To be concluded in the next issue.)

Cooperative Research Act Off to a Slow Start

Backers of the National Cooperative Research Act predicted that the protection it provides against heavy antitrust liability would make industrial firms less hesitant to team up for R&D collaboration. But an examination of Justice Department records by SGR shows that 8 months after the Act took effect, its main users so far are a handful of pre-existing joint ventures in R&D.

Under the Act, which went into effect January 1, industrial firms that register their intentions with the Justice Department for collaborative R&D activities are liable only for actual damages to any private plaintiff who successfully challenges them in court on antitrust grounds; without the protection of the Act, the liability could be for treble damages. In addition, the Act saddles an unsuccessful plaintiff with his target's legal fees if the court rules the suit lacks a substantial basis.

The legislation was strongly backed by the Administration and by industrial research organizations, both of which argued that the heavy penalties and ambiguities of antitrust enforcement were impeding industry's inclination to collaborate on generic research problems. Others argued that a low level of generic collaborative research, mainly through industrial associations, has been going on for many years without encountering a successful private law suit. That point was offered by one of the Administration's own witnesses, James C. Miller III, Chairman of the Federal Trade Commission, who expressed doubt that the legislation was needed or that it would uncork a stampede of collaboration.

One of the first to register under the Act was a collaborative organization that had previously been given a reassuring wink by the Justice Department, the Microelectronics and Computer Technology Corporation (MCC), a consortium of 20 big firms.

Then came the Software Productivity Consortium, a 13-member combine of major firms, which said that its purpose at this stage was to explore a joint venture in advanced computer software tools and techniques.

Exxon Production Research and Halliburton Services also registered notice of collaboration on oil-well research, but their agreement dated back to May 1983. Another registrant, Computer Aided Manufacturing-International—embracing scores of firms in the US and abroad—was established in 1972.

Another pre-existing venture, Bell Communications (Bellcore), registered as the joint R&D organization of the regional firms spun off by the AT&T divestiture.

Among other registrants that are oldtimers in collaborative research are the Portland Cement Association, which embraces some 40 cement firms plus a few other organizations, and the Motor Vehicle Manufacturers Association of America, a wide-ranging organization that goes back to the early days of the auto industry. The latter registered 14 collaborative ventures, mostly involving fuel-emission studies. But altogether, they amount to "maybe a couple of million dollars," according to a source at the Association. Most, if not all, of the projects were underway before the Act came into effect.

Other registrants and their stated purpose for a joint venture: Merrell Dow Pharmaceuticals and Hoffman-LaRoche Inc., evaluating a cancer treatment.

Uninet Inc. and Control Data, R&D on "advanced packet switching data communications networks."

Bellcore and Honeywell Inc., R&D on advanced gallium arsenide integrated circuits.

United Technologies and Toshiba, collaborating through International Fuel Cells Corporation, R&D on fuel cells development and operations.

"For the Price of a Letter"

In the view of one attorney at a trade association that registered its long-running cooperative R&D activities with the Justice Department, "You can do it for the price of a letter, so why not?"

Like many other research activities that have been registered under the National Cooperative Research Act, the association's joint ventures have never faced an antitrust challenge. "Maybe we'll start some projects," the lawyer said. But he expressed doubt that the Act's protection against treble damages would influence the members' decision.

Passage of the Act was assisted by the argument that industry is withholding from R&D collaboration out of fear of antitrust penalties. But the Reagan Administration is no tiger in antitrust enforcement and private suits claiming antitrust damages from cooperative research are rare and perhaps hopeless. Lawrence J. White, former Chief Economist in the Justice Department's Antitrust Division, recently wrote that "to my knowledge, no plaintiff has ever won a case against a member of a collective-research effort."

With the Act less than a year old, it is too early to assess its value. Corporate lawyers often know little about the intricacies of antitrust law and tend to cover that deficiency by advising against anything that might conceivably bring trouble. But if the new consortia, such as MCC, pay off in generic developments and stay out of legal difficulties, the word will get around that it can be done safely. The promise of the National Cooperative Research Act may then be fulfilled. So far, however, its impact has been negligible.

In Print: R&D Patterns, Manpower, Money & More

The following publications are available from the organizations listed; no charge, unless indicated:

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National Science Foundation, Division of Science Resources Studies, 1800 G St. Nw., Washington, DC 20550; tel. (202) 634-4622:

National Patterns of Science and Technology Resources (NSF 84-311), 89 pages, one of the most valuable publications in NSF's statistical series, gives the big picture over 25 years or more for federal and industrial R&D spending, providers and recipients, educational enrolments, and R&D employment patterns.

Federal R&D Funds for Research and Development, Fiscal Years 1982, 1983, and 1984 (NSF 84-326), 45 pages, 32d edition of the standard source of data on federal support of R&D; covers all sectors—academic, industrial, inhouse, and also provides data on geographic distribution, construction spending, and important trends.

Academic Science/Engineering R&D Funds, Fiscal Year 1983 (NSF 85-308), covers distribution of federal R&D money among the 100 universities that got 82 percent of the total, plus the other 466 that got something.

Science and Engineering Personnel: A National Overview (NSF 85-302), 160 pages, 3d of a biennial series, teeming with data about the education, employment, pay, sex, racial background, and so forth of the nation's 3 million scientists, engineers, and computer specialists; notes that these professionals now make up 3.4 percent of the nation's workforce, and that from 1976-83, their employment grew at almost twice the rate of all other professionals and triple the rate of the US work force.

Federal Scientific and Technical Workers (NSF 85-312), 34 pages, complements the *Overview*, above, focusing on the 219,000 civilian R&D professionals of all kinds in federal employment.

Academic Science/Engineering: Scientists and Engineers, January 1984 (NSF 85-316), 112 pages, another complement to the *Overview*, reports numbers of full- and part-time scientists, engineers, their disciplines, degree levels, and sexes at universities throughout the country.

A Comparative Analysis of Information on National Industrial R&D Expenditures (NSF 85-311), 15 pages, compares NSF's annual survey of industrial R&D spending with surveys from the SEC, the business press, and other sources, and discusses the surveys' varying scopes and methodologies.

Finally, there's a bibliography of the 1973-84 output of the NSF division that produced the above publications and many more: *Publications List* (NSF 85-310).

Congressional Budget Office, 2d and D Sts. Sw., Washington, DC 20515; tel. (202) 226-2809:

Federal Financial Support for High-Technology Industries, 92 pages, requested by the Senate Budget Committee, reviews existing and proposed government boosters for high-tech industry—direct R&D support, tax incentives, patent protection, etc.; weaselly concludes that "the government is already spending large sums to enhance the competitive position of high-technology industries, although the effectiveness of many of its programs is open to question."

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National Academy Press, National Academy of Sciences, 2101 Constitution Ave. Nw., Washington, DC 20418; tel. (202) 334-3313.

Research Briefings 1985, 100 pages, $9.95, 4th of an annual series of sales pitches by panels of specialists appointed by NAS at the request of the White House Science Office and NSF for the stated purpose of enlightening the federal R&D priority setting process. This year's titles are Pain and Pain Management, Biotechnology in Agriculture, Computer Vision and Pattern Recognition, Weather Prediction Technologies, Remote Sensing of the Earth, Ceramics and Ceramic Composites, and Scientific Frontiers and the Superconducting Super Collider.

That last one, unmarred by any reference to knowledgeable and mounting objections to the Super ("Bell Labs R&D Chief Knocks the Big Accelerator," SGR Vol. XV, No. 7), simply restates previous pleadings for the machine, all of them known, of course, to the Science Office and NSF when they signed on for what the Academy describes as "an important new means of informing government officials." Performances of this type do not contribute to the Academy's sought-for image of purity in behalf of the public interest.

Injury in America: A Continuing Public Health Problem, 164 pages, $15.95, report by an NAS Committee chaired by William H. Foege, former Director, Centers for Disease Control, says that cars, guns, poison, and other instruments of violence exceed disease in reducing potential years of life; urges a reexamination of health-promoting priorities and proposes a research agenda for reducing injuries.

Sharing Research Data, 225 pages, $17.50, report by the Academy's Committee on National Statistics, warns of an increasing trend toward withholding rather than sharing, and says that the quality and progress of research are promoted by free circulation of data, but notes problems arising from confidentiality requirements, copyright protections, and so forth.

Low Marks For Science-Foreign Policy Report

Rarely does a published Presidential report come with a built-in Congressional commentary that says it's pretty thin stuff and doesn't fulfill the Congressional mandate that spawned the report. But such is the case with *Science, Technology, and American Diplomacy 1985*, latest of a series that the President, under the Foreign Relations Authorization Act of 1979, must annually submit to the House Committee on Science and Technology and the Committee on Foreign Affairs.

With an introductory letter signed by the President, the 192-page report describes numerous US government agreements and programs with other nations and international organizations, the international activities of US R&D agencies, and it provides a rosy description of the State Department's interest in science and technology as instruments of foreign policy.

The overall product, however, suggests a hurried snip-and-paste operation performed under distasteful Congressional pressure, rather than a straightforward report on science in foreign policy.

Behind all this, of course, is the fact that science's friends in Congress have never been happy about the poor-relation role that science and technology hold in the State Department; the imposition of an annual report requirement is a standard Congressional technique for scrutinizing and prodding a recalcitrant federal agency.

At the request of the two Committees, the report, prior to its publication by Congress, was reviewed by the Library of Congress' Congressional Research Service. CRS noted that the document discussed only 18 of the US's 50 or more bilateral science and technology agreements, and that the discussion that was provided "for the most part, did not give the information required by the statute—on the foreign policy implications and scientific and technological benefits of such activities . . . "

CRS said the financial data in the report were better than before, but still were insufficient. "It is difficult to understand," said the CRS, "how the Administration can conclude, as it did, that budgets for international science and technology programs are adequate without knowing what those program costs and budgets are."

Basing their comments on the CRS analysis, Foreign Affairs Chairman Dante B. Fascell and Science and Technology Chairman Don Fuqua, both Florida Democrats, expressed dismay with the report in a brief forward. They urged "the executive branch to address these deficiencies, thereby avoiding the necessity of Congress to adopt legislative changes to address the aforementioned problems."

But there's no power behind such threats. The basic problem is that the Reagan Administration doesn't put much stock in government-orchestrated scientific relations between nations, and that's reflected by the skimpy report.

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